

NASPNCLAINST 4100.2F
Code 20000
19 Nov 99

NASPNCLA INSTRUCTION 4100.2F

Subj: ENERGY RESOURCE MANAGEMENT

Ref: (a) Executive Order 12902 of 8 Mar 84
(b) OPNAVINST 4100.5D
(c) CNETINST 4100.3D
(d) 1996 DOD Energy Manager's Handbook

Encl: (1) NAS Pensacola Energy Conservation Organization
(2) Actions for NAS Pensacola Energy Management Program
(3) Building Energy Monitor Duties
(4) Air-Conditioning Exception Procedures
(5) Energy Discrepancy Notification Memorandum

1. Purpose. To direct energy management measures for reducing energy consumption aboard NAS Pensacola, NTTC Corry Station, and NETPDTC Saufley Field while maintaining command mission.

2. Cancellation. NASPNCLAINST 4100.2E

3. Background. Energy management is an issue that affects everyone and requires participation at all levels. No command or activity is exempt from participation in an effort to conserve energy. Substantial reductions in consumption of all types of energy are required to stay within fiscal constraints as well as supply limitations. Therefore, mandatory conservation measures have been implemented and must be aggressively pursued. In addition, strong continuing efforts must be made to achieve maximum voluntary reduction where mandatory controls are not appropriate.

4. Information

a. Policy. Every effort shall be made to achieve the objectives and goals of this instruction without compromise to military readiness, safety, or mission effectiveness.

b. Objectives

(1) To develop, implement, and publicize a strong and aggressive program for reducing consumption of all energy and water within the NAS Pensacola Region, to meet specific goals established or directed by higher authority, and to establish the management mechanisms to monitor, review, and improve energy management methods.

(2) To achieve maximum reduction in energy consumption by actively involving all activities and commands.

(3) To institute corrective measures when necessary and acknowledge accomplishments in the energy conservation effort.

(4) To pursue and implement suggestions on energy conservation when practical.

c. Goals. The NAS Pensacola Region's energy management goals support the Federal and DOD energy programs as set forth in references (a) through (d). Conservation goals are measured from the 1985 baseline (1 October 1984 through 30 September 1985).

(1) Existing Buildings. Reduce energy consumption per thousand gross square feet (KSF) by 30 percent from 1985 baseline by the end of FY 2005. Further reduce energy consumption by at least 1.5 percent each fiscal year through FY 2005, regardless of previous goal attainment.

(2) New Buildings. Reduce the estimated annual design energy usage per KSF by 1 percent per year, achieving a 10 percent reduction for buildings designed in FY 95 compared with comparable buildings designed in FY 85.

(3) All Shore Activities shall support the following overall Navy goals:

(a) Obtain 10 percent of total Navy shore facility energy from coal, solid fuels, and renewable energy sources.

(b) Comply with the requirements of the Energy Policy Act of 1992 pertaining to vehicles and facilities.

5. Scope. This instruction is applicable to military and civilian personnel assigned to and working at NAS Pensacola or tenant commands occupying NAS Pensacola property.

6. Responsibility

a. Enclosure (1) defines the NAS Pensacola Energy Conservation Organization and its responsibilities.

b. Enclosure (2) describes actions to be accomplished and criteria to be followed by NAS Pensacola Department Heads, Special Assistants, and tenant activities in aggressively managing the Energy Conservation Program.

c. Enclosure (3) describes duties of Building Energy Monitors.

d. Enclosure (4) outlines specific guidelines and responsibilities relating to air-conditioning exception procedures.

e. Enclosure (5) is an example of Energy Discrepancy Notification Memorandum.

7. Action

a. Naval Air Station Pensacola Department Heads, Special Assistants, and tenant activities are requested to actively support the Energy Conservation Program by using individual initiatives to prevent energy misuse.

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b. Personnel are encouraged to report energy discrepancies and suggestions to the NAS Pensacola Energy Office (452-4515, ext. 352).

8. Forms. Coffee Mess/Hot Plate/Space Heater Authorization, NASP 5101/37, is available from ADMIN, Code ADAP.

/s/

RANDAL L. BAHR

Distribution:

A C D

(NASPNCLAINST 5216.1T)

Stocked:

Commanding Officer

NAS Pensacola

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NAS PENSACOLA ENERGY CONSERVATION ORGANIZATION

1. An effective Energy Conservation Program requires a well-defined chain of command for accountability. Accordingly:

a. The NAS Pensacola Energy chain of command will be:

(1) Commanding Officer, NAS Pensacola.

(2) Executive Officer/Energy Conservation Board, NAS Pensacola.

(3) Facilities Management Department, NAS Pensacola Energy Conservation Team.

(4) Department Head and Tenant Building Energy Monitors (BEM's).

b. Naval Air Station Pensacola Department Heads, Special Assistants, and tenant commands shall have a visible and active commitment to energy conservation, being responsible for the energy conservation in cognizant areas.

c. All host-tenant agreements with tenants whose energy usage is reported as part of NAS Pensacola's or those who have utilities funded by the host, shall require the tenant to comply with the host energy conservation requirements.

d. The NAS Pensacola Energy Conservation Office, a function of the Facilities Management Department, is responsible for the development and implementation of the Energy Management Program.

e. The Energy Conservation Board (ECB), chaired by the Executive Officer, convenes three times annually to promote energy conservation throughout the NAS Pensacola Region. All Department Heads and major tenant commands will be represented.

f. The Energy Conservation Team (ECT) consists of the Regional Energy Manager (EM) and the Energy Action Team (EAT). The EM coordinates and directs the energy conservation efforts for the region. The EAT assists with conservation efforts and monitors compliance with existing standards. During working hours, they schedule appointments with BEM's and conduct inspections to identify problems and discrepancies. After-hour inspections are also conducted.

g. Department and tenant BEM's are responsible for energy conservation within their respective spaces in accordance with enclosure (3). Additionally Corry Station, Saufley Field, and major tenant commands will have a command Energy Manager who will be directly responsible to the ECT. These Energy Managers will coordinate the efforts of assigned BEM's and track conservation progress in their buildings.

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ACTIONS FOR NAS PENSACOLA ENERGY MANAGEMENT PROGRAM

1. Information. By making energy conservation information available to employees, wasteful practices can be reduced. Accordingly:

a. Public Affairs Office will periodically include in the "Gosport" an energy conservation cartoon or article provided by the Energy Conservation Team (ECT)

b. The Plan of the Week will include, on a periodic basis, an energy conservation tip provided by ECT.

c. The Energy Action Team (EAT) will present an energy brief at command indoctrination.

2. Energy Management. The EAT will monitor temperature, thermostat settings, lighting levels, and equipment for operating discrepancies. A memorandum of noted discrepancies, enclosure (5), will be forwarded with a reply requested to the Building Energy Monitor (BEM) via the Department Head. The second memorandum will be sent via the Commanding Officer, NAS Pensacola. This memorandum will be answered by the cognizant Department Head and include action taken to correct the discrepancy.

3. Government Vehicles. All government vehicles will observe speed limits. All activities should encourage maximum effective usage of all vehicles, material handling equipment, and ground support vehicles. All government vehicles will be restricted to "Official Use Only." Vehicle discrepancies resulting in fuel consumption waste should be directed to Public Works Center (PWC) Pensacola Transportation.

4. Facility Operation. Operating hours of facility energy systems shall be minimized as much as possible without adversely affecting mission requirements, building materials and systems, and quality of life of personnel using or living in the facility.

5. Heating and Cooling. The Commanding Officer, NAS Pensacola, establishes the heating and cooling policy aboard the station based upon recommendations from the Energy Conservation Team. Start-up/Securing of HVAC equipment into the heating/cooling season will not be initiated until the following

conditions have been met and the Commanding Officer approves the start-up. Exceptions can be addressed in accordance with enclosure (4):

a. Heating. The start-up and securing of HVAC equipment will be initiated upon recommendation from Naval Atlantic Meteorology and Oceanography Center.

b. Cooling. The following criteria will be used as guidelines for the start-up of the cooling season. However, extenuating circumstances will also be taken into consideration. Examples of such items are extremely unusual temperatures, building heat loads, building layout, and quality of life for occupants.

(1) The forecasted mean temperature for 5 consecutive days is at least 70 degrees Fahrenheit (F) and the daytime relative humidity is 80 percent or higher.

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(2) Exterior maximum temperatures forecasted for a 10-day period do not fall below 80 degrees F.

(3) Exterior minimum temperatures do not fall below 55 degrees F for the same 5-day period.

c. Thermostat Settings

(1) Heating

(a) No higher than 70 degrees F when occupied.

(b) No higher than 55 degrees F when unoccupied.

(2) Cooling

(a) No lower than 76 degrees F, except when lower temperatures are required for electronic or ADP equipment.

(b) Comfort cooling will be secured during nonworking hours, except when normal settings are required for electronic or ADP equipment.

d. Heating and Cooling Guidelines

(1) Interior space temperatures shall be maintained as specified. However, equipment will not be operated off-season (i.e., boilers in summer, air-conditioners in winter) if their use is not required to maintain space temperature. The only exception is for humidity control. Requirements for humidity control must be submitted in writing to the Facilities Management Officer (FMO) for approval/disapproval.

(2) Programmable thermostats will be used to automatically set back temperatures.

(3) All requests for heating and cooling should be coordinated through the FMD Energy Office.

(4) Heating or cooling is not allowed in unoccupied spaces.

(5) All doors and windows will be closed while spaces are heated or cooled.

(6) Using window air-conditioning units is prohibited in structures with central units except to provide spot cooling for electronic or ADP equipment while main units are secured.

(7) Installation of new air-conditioning equipment is prohibited without written approval of the FMO.

(8) Space heaters are NOT AUTHORIZED for use aboard NAS Pensacola per reference (a) unless specifically authorized by the FMD Energy Office. Every effort must be made to avoid their use because of their inherent energy

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inefficiency. Authority for operation of electric space heaters may be requested by written memorandum to the FMD Energy Office. Upon approval, the request will be forwarded to the NAS Pensacola Fire Department for issuance of Coffee Mess/Hot Plate/Space Heater Authorization (NASP 5101/37).

(9) Exemptions and heating exceptions will be considered upon receipt of written request with justification to the FMO. Specific air-conditioning exemption procedures are covered in enclosure (4).

6. Lighting

a. Lighting levels will be maintained at the levels noted for the respective areas:

(1) Work stations (desks, machinery, work benches, computer terminals, etc.): 50 footcandles.

(2) Work areas (copies, filing cabinets, book shelves, etc.): 30 footcandles.

(3) Warehouses - non-active: 5 footcandles, active bulk: 10 footcandles, rack: 25 footcandles.

(4) Nonwork areas (coffee messes, staging areas, passageways, restrooms, etc.): 10 footcandles.

Note: Any areas believed to be excessively light or dim shall be brought to the attention of the ECT.

b. Turn off all lighting in unoccupied spaces. Utilize occupancy sensor, motion detector, or auto on/off lighting switches to secure lighting in unoccupied spaces.

c. Natural lighting should be used before electrical lighting whenever practicable.

d. All interior and exterior security lighting will be minimized, consistent with security requirements.

e. All exterior lighting will be secured during the hours of daylight. Photocells will be used on all exterior lighting.

f. Decorative lighting is prohibited.

g. When replacing light bulbs, use low wattage bulbs in corridors and other areas of general illumination. Do not use bulbs with a larger wattage rating than necessary. Incandescent lighting should be eliminated or retrofitted with energy-saving compact fluorescent lighting wherever possible. The building occupant is responsible for inspecting and cleaning lighting fixtures and reflectors biannually.

h. Incandescent exit signs will be replaced with the Light Emitting Diode (LED) type.

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i. Turn off computers, electric typewriters, calculators, desk lamps, etc., when not in use.

j. Any lighting fixtures permanently secured must be marked, "THIS EQUIPMENT DISCONNECTED FOR ENERGY CONSERVATION." Stickers are available at the Energy Office.

k. Recreation areas should be illuminated only when in use. Secure lighting when the event is finished.

7. Water. The following efforts and precautions will help to eliminate water waste and energy consumption. Even the use of cold water adversely affects our energy consumption as our water is "pumped" to its using point.

a. Plumbing Fixtures

(1) Hand-tighten all faucets, valves, and shower controls not in use. Toilets or urinals that run constantly shall be reported immediately. Flushometers shall be adjusted to the proper rate-of-flow.

(2) Plumbing fixtures can meet water conservation standards by using the following gallon per minute (GPM) flow rates:

(a) Kitchen and lavatory faucets fitted with a 1.0 GPM aerator.

(b) Showerheads rated at 2.5 GPM or less.

(c) Toilet tanks or flush valves that deliver 1.6 gallons per flush (GPF).

(d) Urinal flush valves delivering 1.0 GPF (waterless urinals are also an option).

b. Hot Water

(1) Domestic hot water systems within facilities will use properly sized and energy-efficient equipment meeting the hot water requirements of the facility. Approval for installation and recommendation of hot water heaters will be obtained from the FMO. Demand type water heaters will be used wherever possible in place of tank type.

(2) Hot water heating equipment thermostats will be set as follows:

(a) No higher than 105 degrees F in facilities where dishwashing equipment is not used.

(b) No higher than 180 degrees F in food service facilities where dishwashing equipment is used.

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c. Washing aircraft and vehicles (government and privately owned):

(1) Shall be washed in designated areas only.

(2) All hose equipment will have a shut-off nozzle. An automatic shut-off nozzle will be used on all hoses under 2 inches in diameter.

(3) All hose equipment will be free from leaks when turned off.

d. Irrigation

(1) Watering anytime between the hours of 0800-1800 is discouraged, when possible, to reduce waste through evaporation. Use automatic timers.

(2) Report all irrigation leaks and discrepancies immediately to the FMD First LT Division.

8. Exceptions. To request exceptions to any portion of this instruction, submit written justification to the FMO, Code 20000, Building 3560.

9. All personnel are responsible for energy conservation and shall abide by the guidelines of this instruction. Energy conservation suggestions are encouraged and can be given to the Regional Energy Manager.

BUILDING ENERGY MONITOR DUTIES

1. Activities are required to appoint prime Building Energy Monitors (BEM's) responsible for energy conservation within buildings assigned to the activity. For coordination and continuity purposes, Building Managers responsible for maintenance shall be appointed as BEM's.
2. Names of BEM's are submitted to the Energy Office, Building 3560, and updated when changes occur. Alternates may be assigned in large buildings, departments, or tenant commands. The following criteria will serve as guidelines for BEM's and other individuals responsible for energy conservation and monitoring:
 - a. All BEM's shall attend semiannual BEM meetings and relay pertinent energy information to all personnel in their respective area.
 - b. Each BEM will become familiar with the location of all energy-consuming equipment; e.g., lighting, office equipment, heating and air-conditioning equipment, etc.
 - c. All BEM's will conduct daily walk-through inspections to ensure energy conservation measures outlined in this instruction are being followed.

d. All BEM's will ensure personnel in their respective areas are aware of the Energy Conservation Program and will encourage compliance in such areas as securing office equipment when not in use, securing lights in unoccupied spaces, etc. Suggestions and discussions are to be encouraged and relayed to the NAS Pensacola Regional Energy Manager at 452-4515, ext. 332.

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AIR-CONDITIONING EXCEPTION PROCEDURES

1. Exceptions for continuous or early turn-on of air-conditioning systems will only be granted for exceptional reasons. These exceptions will primarily be confined to those areas with data processing equipment and instructional areas without or poor ventilation. The following procedures apply:

a. Data Processing Equipment Exceptions

(1) Environmental temperature in excess of maximum recommended for effective equipment operation, considering both length of time at an elevated temperature and the temperature; i.e., transient conditions will not be an acceptable reason. Notify EAT who will certify temperature condition and determine if there is a ventilation alternative.

(2) Send temperature information with results of the EAT certification by memo to the Information Systems Manager, Building 624, who will confirm equipment requirements and forward to FMD for approval/disapproval.

b. Instructional Area Exceptions

(1) Temperature of spaces must exceed 80 degrees F for a minimum of 3 days, and forecasted weather shall be supportive of continued high internal building temperature prior to initiating exception request.

(2) Notify EAT, who will certify environmental condition and determine if there is a ventilation alternative.

(3) Forward all action to FMD for review and approval/disapproval of exception request and issue appropriate order concerning air-conditioning.

2. Requests for air-conditioning exception may be originated by a Department Head and forwarded by memo to FMD in lieu of the foregoing procedure. The request must clearly state the reason for the requested exception and include a certification by the Department Head that his/her mission cannot be accomplished without the requested relief. The Department Head will also ensure the EAT has determined no other ventilation means exists.

Enclosure (4)
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ENERGY DISCREPANCY NOTIFICATION MEMORANDUM

From: Facilities Management Officer, Naval Air Station, Pensacola
To:

Subj: ENERGY DISCREPANCY

Ref: (a) NASPNCLAINST 4100.2F

1. A daily zone inspection was conducted by the Energy Action Team (EAT) on _____. The following discrepancy to reference (a) has been noted and brought to your attention:

Building Number:

Time:

Building Monitor:

Phone:

Description of Discrepancy:

2. A reply to confirm that corrective action taken is requested within 5 WORKING DAYS. Replies may be typed on the reverse side of this memorandum and sent to the Facilities Management Officer, Code 20000. If the discrepancy requires a service call or work request, include the number in the response. The EAT is available at 452-4515, ext. 352, to provide assistance or guidance in correcting the discrepancy.

FACILITIES MANAGEMENT OFFICER

Enclosure (5)